



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,546	05/26/2005	Anja Patien	2235USWO	9817
43896	7590	01/30/2007	EXAMINER	
ECOLAB INC. MAIL STOP ESC-F7, 655 LONE OAK DRIVE EAGAN, MN 55121			DOUYON, LORNA M	
			ART UNIT	PAPER NUMBER
			1751	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/536,546	Applicant(s) PATIEN ET AL.	
	Examiner Lorna M. Douyon	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/26/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. Claims 26 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 lacks support for "the third acid" in line 2 with respect to claim 19. This claim should properly depend from claim 24.

Claim 29 lacks support for "the plastic capsule" in line 1 with respect to claim 19. This claim should properly depend from claim 28.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 19-23 and 30 are rejected under 35 U.S.C. 102(a) as being anticipated by Joubert et al. (WO 03/035819), hereinafter "Joubert".

Joubert teaches a scale preventative formulation (A) in the form of a tablet for the upkeep of dishwashers and/or crockery which is made up of two components and takes the form of a two- or multi-layered tablet consisting of a scale preventative part comprising a scale preventative formulation (A) and a washing agent (see abstract). In Example 4, Joubert teaches a tablet wherein the formulation (A) part comprises 46 wt%

Art Unit: 1751

citric acid, 28 wt% adipic acid and 15 wt% glutaric acid (a total of 43 wt% which corresponds to the second acid of the present claims; ratio of citric acid to second acid is 46:43 or 52:48 which meets the recited ratio) and no water. In Example 6, Joubert teaches 28 wt% citric acid, 50 wt% adipic acid, 8 wt% glutaric acid and 4 wt% succinic acid (last 3 acids totaling 62 wt%; ratio of citric acid to second acid is 28:62 or 31:69, which meets the recited ratio), and no water, see Table 1 on page 11. Inasmuch as the tablet comprises the same components having a ratio as those recited, the tablet should inherently remain solid up to temperatures of 35°C. Hence, Joubert anticipates the claims.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 1751

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joubert as applied to the above claims.

Joubert teaches the features as described above. In addition, Joubert teaches other acids such as phosphoric acid (see page 3, lines 1-2) and other additives such as anionic or nonionic surfactants (see page 6, lines 4-18). Joubert, however, fails to specifically disclose a tablet comprising citric acid; adipic, succinic, glutaric or mixtures thereof; and phosphoric acid in the ratio as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate phosphoric acid in its optimum proportions into the tablet comprising citric acid; and adipic, succinic, glutaric or mixtures thereof because this is another acid which could be added into the scale preventative formulation (A) as disclosed on page 3, lines 1-2. With respect to the proportions of the phosphoric acid, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the phosphoric acid through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is

Art Unit: 1751

obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F2d 454,456,105 USPQ 233,235 (CCPA 1955).

7. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joubert as applied to the above claims, and further in view of Heile et al. (US Patent No. 5,759,988), hereinafter "Heile".

Joubert teaches the features as discussed above. Joubert, however, fails to disclose the dishwashing tablet being surrounded by polyethylene.

Heile, in an analogous art, teaches a warewashing solid block, which may be packaged in water insoluble film envelope such as polyethylene (see col. 10, lines 11-14; 38-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to package the dishwashing tablet of Joubert in polyethylene envelope because similar compositions are packaged in enclosures made of polyethylene as taught by Heile.

8. Claims 19-21, 23-27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrara et al. (US Patent No. 3,557,006), hereinafter "Ferrara".

Ferrara teaches a composite toilet bar consisting essentially of: (a) an alkaline detergent soap composition, in bar form, consisting essentially of a sodium soap of C₁₂ to C₂₂ fatty monocarboxylic acids; (b) a bath oil soap composition, in separate bar form, consisting essentially of a sodium soap of C₁₂ to C₂₂ fatty monocarboxylic acids (which is an anionic surfactant) and a cosmetically acceptable acid like phosphoric acid, adipic acid, citric acid, lactic acid and mixtures thereof; wherein the two separate bar forms are physically joined to form a single integral structure and when said composite bar is used as a cleaner in combination with water, the overall aqueous medium has a pH of from 4 to 7 (see claim 1). A preferred detergent soap is substantially anhydrous which contains 1% water or less (see col. 4, lines 39-41). Ferrara, however, fails to disclose the combination of citric acid, adipic acid and lactic acid in amounts as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a toilet bar comprising the combination of citric acid, adipic acid and lactic acid in their optimum proportions because Ferrara teaches the mixtures of these acids. With respect to their proportions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the citric acid, adipic acid and lactic acid through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff* 919 F.2d

Art Unit: 1751

1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F2d 454,456,105 USPQ 233,235 (CCPA 1955).

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrara as applied to the above claims, and further in view of Lopes (US Patent No. 6,559,110).

Ferrara teaches the features as discussed above. Ferrara, however, fails to disclose the toilet bar further comprising glutaric acid and/or succinic acid.

Lopes, in an analogous art, teaches the incorporation of acidifying agents such as glutaric acid and/or succinic acid, among others, for microbial protection (see col. 3, lines 45-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate glutaric acid and/or succinic acid as further acids in the toilet bar of Ferrara because such incorporation would provide microbial protection as taught by Lopes.

10. In the alternative, claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrara as applied to the above claims, and further in view of Evans (US Patent No. 4,992,193)

Ferrara teaches the features as discussed above. Ferrara, however, fails to disclose the toilet bar comprising alkyl benzene sulfonic acid.

Evans teaches the equivalency of alkylbenzene sulphonic acid with phosphoric acid (see col. 2, lines 62-63).

Art Unit: 1751

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the phosphoric acid of Ferrara with alkylbenzene sulphonic acid because substitution of art recognized equivalents as shown by Evans is within the level of ordinary skill in the art.

11. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrara as applied to the above claims, and further in view of Tauchi et al. (JP 62045516), hereinafter "Tauchi".

Ferrara teaches the features as discussed above. Ferrara, however, fails to disclose the toilet bar being surrounded by polyethylene.

Tauchi, in an analogous art, teaches a bath preparation in tablet form, packed in polyethylene bags (see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to package the toilet bar of Ferrara in polyethylene bags because similar compositions are packaged in containers made of polyethylene bags as taught by Tauchi.

12. Claims 19-21, 23-24, 26-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menke et al. (US Patent No. 5,759,974).

Menke teaches block-form cleaners for flush toilets which consist of at least two masses of different composition, one of the masses being at least partly surrounded by the other mass(es) and the surrounded mass containing an active substance in a

Art Unit: 1751

concentration at least 1.3 times higher than in the surrounding mass (see abstract), and one active substance is acids (see col. 3, lines 20-21; 30-31), to prevent limescale deposits and to remove old coatings from the toilet bowls (see col. 6, lines 16-20).

Suitable acids include amidosulfonic acid, phosphoric acid, citric acid and succinic acid (see col. 6, lines 20-25). Blocks which are intended to be used in the cistern of the toilet are either placed therein as such or are arranged therein in cage-like containers, and cleaning blocks intended for use in the toilet bowl are arranged in suitable holders or in basket- or cage-like containers in the toilet bowl at a place where the incoming flushing water flows past whenever the toilet is flushed (see col. 8, lines 14-22). Several active substances may be present in the cleaning blocks (see col. 3, lines 33-38). In Example 11, Menke teaches cistern blocks comprising a shell and a core, the shell and core comprising sodium lauryl sulfate (an anionic surfactant), cocofatty acid monoethanolamide (a nonionic surfactant), and citric acid, and no water (see col. 12, lines 46-59). Menke, however, fails to disclose a combination of citric acid, succinic acid and phosphoric acid in amounts as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a cleaning block comprising the combination of citric acid, succinic acid and phosphoric acid in their optimum proportions because Menke suggests the mixtures of these acid in column 3, lines 33-38. With respect to their proportions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the citric acid, succinic acid and phosphoric acid through routine experimentation for best results. As to optimization

Art Unit: 1751

results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F2d 454,456,105 USPQ 233,235 (CCPA 1955).

13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Menke as applied to the above claims, and further in view of Bellis et al. (US Patent No. 5,110,868), hereinafter "Bellis".

Menke teaches the features as discussed above. Menke, however, fails to disclose the holder, basket or cage-like container being substantially made of polyethylene.

Bellis, in an analogous art, teaches a shaped toilet bowl cleaning composition which is cast in polymer molds that subsequently become the package, such package being made of polyethylene (see col. 2, lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to package the cleaning block of Menke in a the container made of polyethylene because similar cleaning blocks are packaged in containers made of polyethylene as taught by Bellis.

Art Unit: 1751

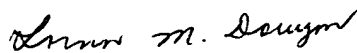
Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Lorna M. Douyon
Primary Examiner
Art Unit 1751